

* Structured Chart Technique

- There are 2 Structured char Technique :
 - 1) HIPO diagram
 - 2) Warnier Orr diagram

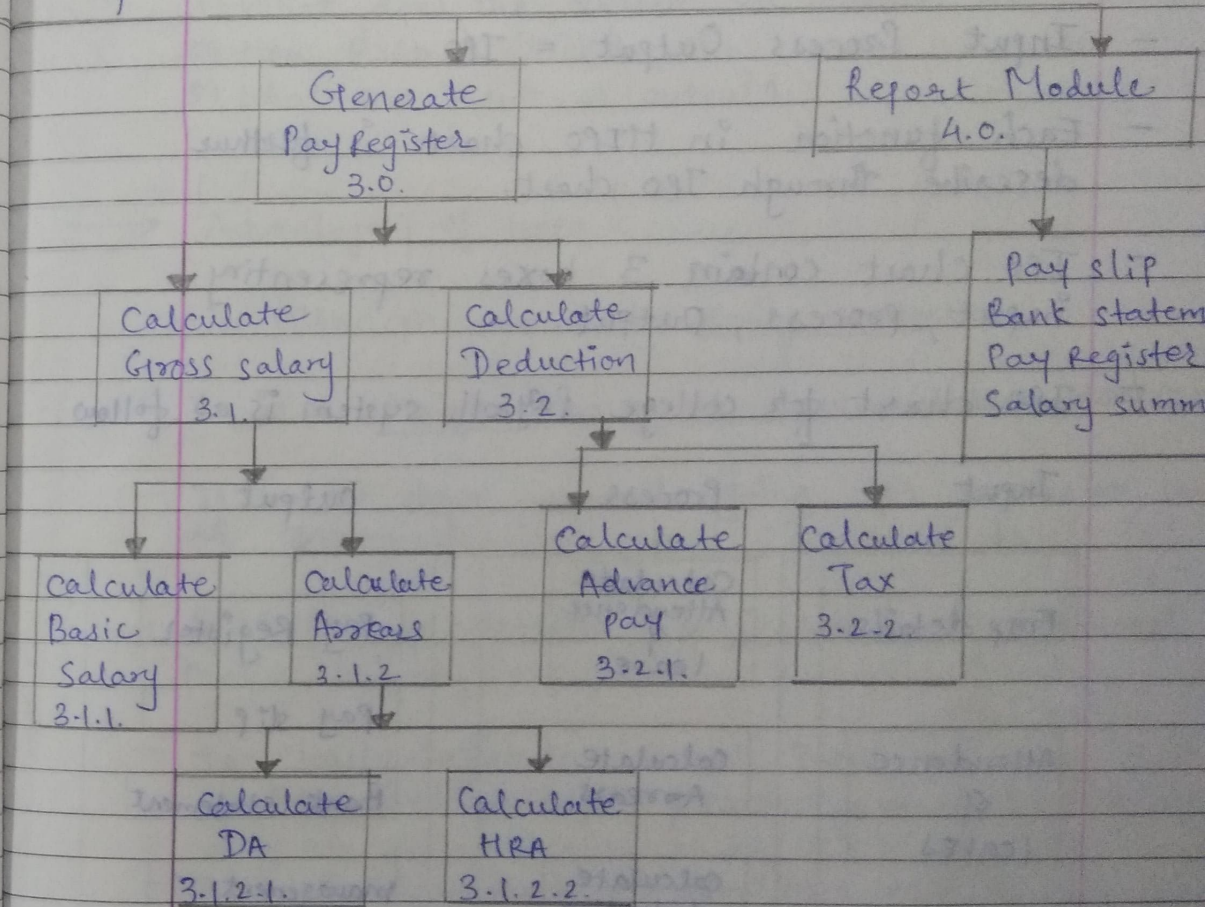
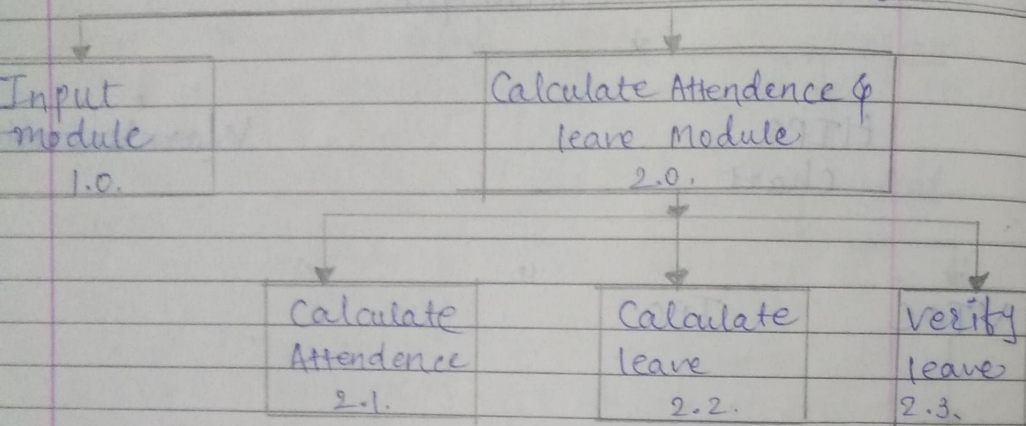
1) HIPO chart

- Hierarchical Input Process Output - HIPO chart, is commonly use tool for developing System s/w and also used in documenting Information.
- It emphasize on functions of system rather than Structure, logic or organisation.
- It consist of 2 type of diagram :
 - ~~1) VTOC~~
 - i) VTOC [Visual Table of Contents]
 - ii) IPO [Input Process Output]

i) VTOC :

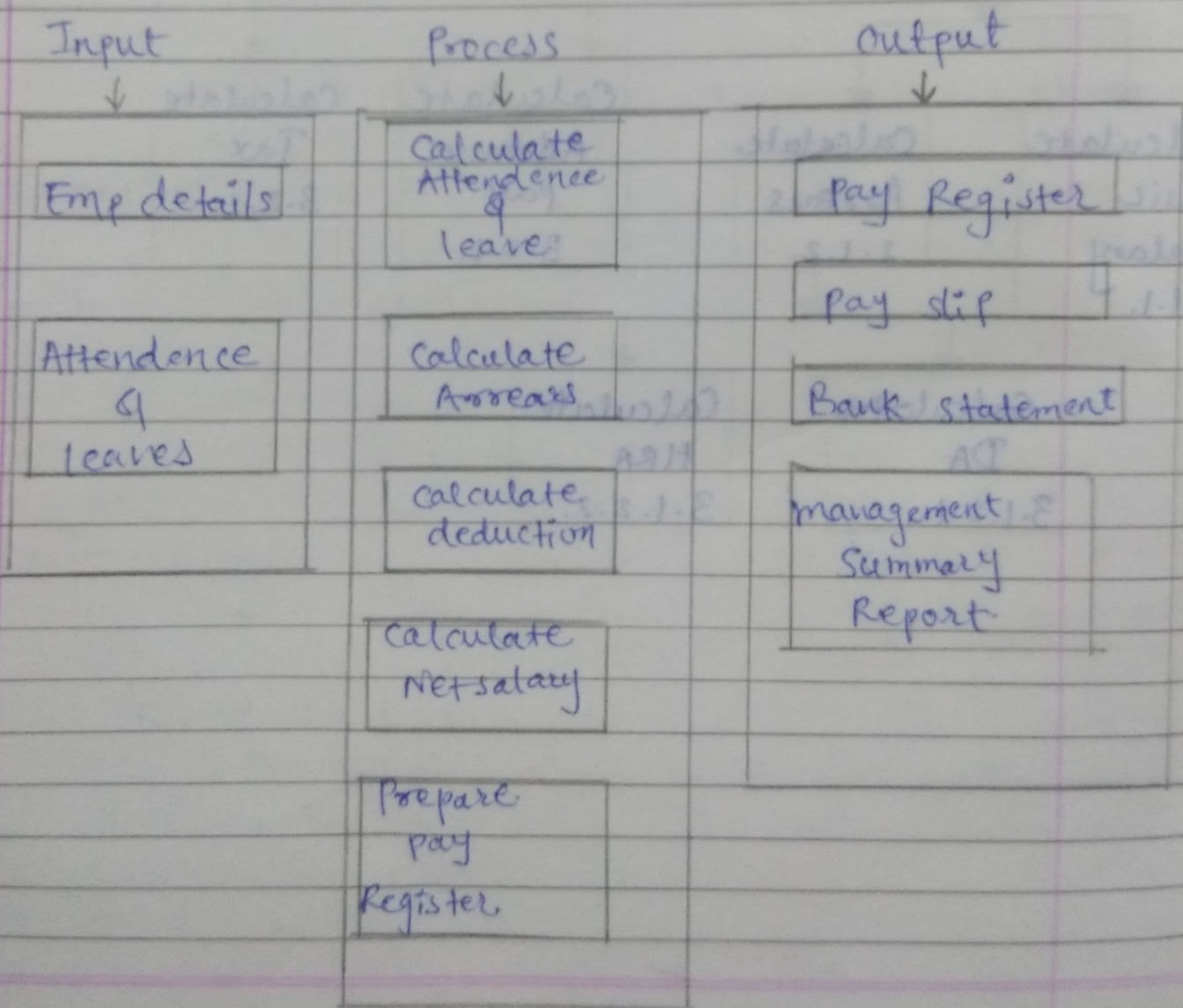
- VTOC diagram break the system or program down into increasingly details level.
- It give relationship of functions in hierarchical manner.
- VTOC consist of 3 parts :
 - a) Hierarchy chart :
which is similar to organization chart
 - b) Legends :
Indicates how symbols are used in hierarchy chart.
 - c) Contents :
Indicates brief description of each module specified in organization chart.
- HIPO chart read from top to down & left to right.

College Payroll System



ii) IPO :

- Input Process Output = IPO
- Each function in HIPO chart is further describe through IPO chart.
- Ipo chart contain 3 boxes representing input, process, Output.
- IPO chart for college Payroll system is as follow.



- The HIPO chart answer following questions
 - 1) What does the System or modules do?
 - 2) How does it do it?
 - 3) What are input or output?

→ Advantages of HIPO :

- It allow program to be easily understand.
- It is a design, develop or documentation tool (3D tool)
- It is top down approach going for successive level or greater details.
- Error can be detected & isolated on functional pass.
- It clearly indicates what input, processing and output are involve in each programming module.
- It design computer program in a module that can be individually assigned, designed and tested easily.
- It is a management tool because functional approach allow planning and scheduling to be made accurately and early in SDLC.

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[Software Development Life ^{cycle} cycle]

- Disadvantages:
- HIPO required extra documentation ~~below~~ beyond flowchart.
 - Training is necessary for programmer before using HIPO chart.
 - HIPO chart concentrate more on what is to be accomplished ~~rather~~ rather than how it is to be accomplished.